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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,003	06/13/2000	Nicolas Vazquez	5150-44300	7955

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Jeffrey C Hood
Conley Rose & Tayon PC
P O Box 398
Austin, TX 78767-0398

EXAMINER

PILLAI, NAMITHA

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 12/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/595,003

Applicant(s)

VAZQUEZ ET AL.

Examiner

Namitha Pillai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-80 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-80 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 June 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the publication date of "Vision for Process Feedback and Control" is after the application's filing date. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract in this application exceeds 150 words.

3. The disclosure is objected to because of the following informalities: the application number referred to in page 14, line 8 is missing.

Appropriate correction is required.

Claim Objections

4. Claim 4 is objected to because of the following informalities: there are two instances of the term “robotics”. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-13, 21-42, 45-64, 67-80 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Patent No. 5,481,712 (Silver et al.).

Referring to claims 1, 53, 71 and 79, Silver discloses a method for graphically displaying a computer program to a display element (column 3, lines 27-37). Silver also discloses recording changes in functions in response to user input, wherein the changes specify the algorithm and a graphical program is automatically generated in response to these changes, wherein the graphical program implements the algorithm (column 2, lines 19-20 and column 4, lines 62-67).

Referring to claims 2 and 54, Silver discloses performing the one or more changes to functions in response to user input. The recording of these changes to the function is performed in response to the performing the changes that were made to the functions. See column 2, lines 19-20.

Referring to claims 3, 32 and 55, Silver discloses creating a prototype (column 2, lines 35-38).

Referring to claims 4, 33, 56 and 72, Silver discloses the prototype comprises in at least one of the disciplines from the group consisting of image processing, machine vision, image analysis, robotics, process control, industrial automation, test and measurement, simulation, workflow processes.

Referring to claims 5, 34, 57 and 73, Silver discloses the recording is performed in response to user input received via a graphical user interface (GUI) (column 2, lines 46-48).

Referring to claims 6 and 58, Silver discloses that the graphical user interface is in relation to a prototyping environment application (column 2, lines 35-48).

Referring to claims 7, 35, 59 and 74, Silver discloses that the user input comprises selecting functions from a menu element in the display (column 2, lines 9-10).

Referring to claims 8, 38, 60 and 75, Silver discloses automatically generating the graphical program comprising programmatically generating the graphical program in response to the recorded one or more functions (column 3, lines 64-67).

Referring to claims 9, 39, 61 and 76, Silver discloses automatically generating graphical code in the graphical program without direct user input (column 3, lines 65-67).

Referring to claims 10 and 62, Silver discloses executing the graphical program to perform the algorithm (column 2, line 64).

Referring to claims 11, 40, 63 and 78, Silver discloses that the graphical program includes a block diagram as the graphically displayed computer program, and a user interface panel portion (column 3, lines 32-37 and lines 45-46).

Referring to claims 12 and 41, Silver discloses that the graphical program is a graphical data flow program (column 2, lines 35-40).

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Referring to claims 13, 42, 64 and 77, Silver discloses automatically generating the graphical program includes having one or more nodes corresponding to the one or more segments in the graphical program. These nodes are part of the parse tree referred to by Silver in column 7, lines 14-17.

Referring to claims 21, 45 and 67, Silver discloses receiving user input specifying code generation information and automatically generating the graphical program utilizes the code generation information (column 3, lines 63-67).

Referring to claim 22, Silver discloses that the type of graphical program can be specified in response to the user's recorded selections and the graphical program can be generated based on the type of program that was chosen by the users (column 4, lines 13-16).

Referring to claim 23, Silver discloses that a particular graphical programming environment is specified and is created in a file format that is usable by the particular graphical programming environment. See column 3, lines 36-38.

Referring to claims 24, 48 and 69, Silver discloses a plurality of parameters associated with functions wherein each parameter provides input to a function (column 2, line 39). Silver discloses that the generated information, which is displayed, specifies input parameters, which are desired to be interactively changeable. Silver also discloses enabling the graphical program to receive user input during program operation, where the user input specifies values for the parameters (column 2, lines 46-49). Silver discloses enabling the graphical program to display output during program operation, wherein the output values are certain output parameters (column 4, line 67).

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Referring to claims 25, 49, 70 and 80, Silver discloses generating portions of graphical code represented in classes to implement the functions and linking these portions of the code together (column 8, lines 32-34, column 15, lines 40-50 and column 16, lines 50-55).

Referring to claims 26 and 50, Silver discloses that each portion of the code includes graphical program nodes, where each node has inputs (column 10, lines 49-52). Silver discloses nodes with inputs and outputs, which are connected together when implementing that certain portion of the code (column 10, lines 50-67 and column 11, lines 1-5).

Referring to claims 27 and 51, Silver discloses linking portions of graphical code connecting output (column 15, line 43) of a node to an input of a node in another portion of the graphical code (column 15, line 44).

Referring to claim 28, Silver discloses that one of the functions has an associated input parameter wherein each portion of the code that implements a function with an input parameter has a node that receives a value for the input parameter (column 11, lines 3-4). A function is also implemented that has an output for providing a value for the input parameter and is connected to the node input for the receiving that same parameter value of “index” (column 10, lines 63-67).

Referring to claim 29, Silver discloses that one of the functions has an associated output parameter wherein each portion of the code that implements a function with an output parameter has a node that receives provides a value for the output parameter. A function is also implemented that has an output for receiving a value for the output parameter and is connected to the node input for the providing that same parameter value. See column 10, lines 63-67, where

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the output parameter is index and the input parameter providing this output value is referred to as the current element.

Referring to claims 30 and 52, Silver discloses a storing element for storing the information for the computer program and generating the portion of the computer program includes retrieving this information from storage (column 2, lines 1-3).

Referring to claim 31, Silver discloses a method for graphically displaying a computer program to a display element (column 3, lines 27-37). Silver also discloses a processor (column 5, line 58) and memory space for storing the graphical computer program, which refers to a specific prototyping environment (column 3, lines 29-30). There is also a user input device, which receives user input (column 4, lines 46-48). Silver also discloses recording changes in functions in response to user input, wherein the changes specify the algorithm and a graphical program is automatically generated in response to these changes, wherein the graphical program implements the algorithm (column 2, lines 19-20 and column 4, lines 62-67).

Referring to claims 36, 46 and 68, Silver discloses memory space for storing the graphical computer program (column 3, lines 29-30). Silver discloses that the application is executable to call the graphical program, which generates the graphical program in response to the application calling the graphical program (column 2, lines 64-67).

Referring to claims 37 and 47, Silver discloses that the graphical creation program is a graphical programming development environment application (column 1, lines 37-39).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 14-16, 43 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silver and "IMAQ Vision Builder Tutorial", herein referred to as IMAQ.

Referring to claims 14, 43 and 65, Silver does not refer to a script. IMAQ refers to recording a script (page 1-3, lines 4-5). IMAQ discloses creating an association between the script and the graphical program (page 1-3, lines 2-4). IMAQ discloses modifying the script to make a new script in response to user input after creating the association. The graphical program is also modified according to the new script to create a new graphical program. See page 1-3, lines 2-5 and lines 17-20. It would have been obvious to one of ordinary skill in the art at the time the invention is made to modify Silver's invention such that it has a script, which the user uses to make modifications to the graphical program. When identical modifications need to be made to several programs, a script can be used to run and set up for more than one program. One skilled in the art would be motivated to learn from IMAQ's teachings to create scripts that are recorded and run on various other programs with the same changes.

Referring to claim 15, IMAQ discloses modifying the graphical program according to the new script uses the association between the script and the graphical program. The association will remain as the new script is running on the newly created graphical program (page 1-3, lines 17-20).

Referring to claim 16, IMAQ discloses receiving user input indicating a desire to change the graphical program (page 2-6, lines 10-12). The script information is displayed and the

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information is modified in response to the user input (page 2-8, lines 1-2). The graphical program is modified after modifying the script information (page 2-8, lines 2-3).

7. Claims 17-20, 44 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silver and IMAQ and further in view of U. S. Patent No. 5,623,659 (Shi et al.).

Referring to claims 17, 44 and 66, Silver does not disclose a script and locking the association between the script and the graphical program. IMAQ discloses creating an association between the script and the graphical program (page 1-3, lines 2-4). It would have been obvious to one of ordinary skill in the art at the time the invention is made to modify Silver's invention such that it has a script, and an association between this script and the graphical program is created. When identical modifications need to be made to several programs, an association between this script and the graphical program is created in order to set up and make changes to more than one program. One skilled in the art would be motivated to learn from IMAQ's teachings to create scripts and form an association between these scripts and a graphical program.

Silver and IMAQ do not disclose locking the association between the script and the general program. Shi discloses locking the association between a program and a user, wherein the locking prevents other users from editing the portion associated to the initial user (column 2, lines 5-11). It would have been obvious to modify Silver and IMAQ's invention such that locking the association between the script and the graphical program wherein the locking prevents the user from editing the program. The program of Silver and IMAQ's invention does require control of the user's input actions in order to ensure that unnecessary mistakes do not occur (Silver, column 1, lines 65-67). One skilled in the art would be motivated to learn from

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Shi's teachings by locking the association between the script and the graphical program to have user control.

Referring to claim 18, Shi discloses unlocking the association between the script and the graphical program in response to user input after locking. Shi also discloses directly changing the portion in response to the changes made by the user. See column 2, lines 19-23.

Referring to claim 19, Shi discloses unlocking such that it removes the association between the script and the program (column 2, lines 19-20).

Referring to claim 20, Silver and IMAQ discloses modifying the script to make a new script in response to user input after creating the association. The graphical program is also modified according to the new script to create a new graphical program. See IMAQ, page 1-3, lines 2-5 and lines 17-20. Shi discloses determining if an association exists between the script and the graphical program in response to modifying the graphical program (column 2, lines 3-5). Shi discloses removing the association between the script and the graphical program in response to modifying (column 2, lines 19-20).

Conclusion

8. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach the method for creating a program to perform an algorithm based on a prototype.

Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington D.C. 20231. If applicant desires to fax a response, (703) 746-7238 may be used for formal After Final communications, (703) 746-7239 for Official communications, or (703) 746-

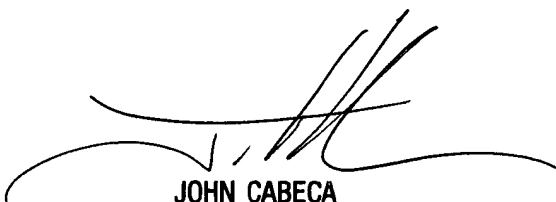
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7240 for Non-Official or draft communications. NOTE: A Request for Continuation (Rule 60 or 62) cannot be faxed. Please label "PROPOSED" or "DRAFT" for informal facsimile communications. For after final responses, please label "AFTER FINAL" or "EXPEDITED PROCEDURE" on the document. Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist). Any inquiry concerning this communication or earlier communications from the examiner should be directed to Namitha Pillai whose telephone number is (703) 305-7691. The examiner can normally be reached on 8:30 AM - 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (703) 308-3116.

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3800.

Namitha Pillai
Assistant Examiner
Art Unit 2173
November 27, 2002



JOHN CABECA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100